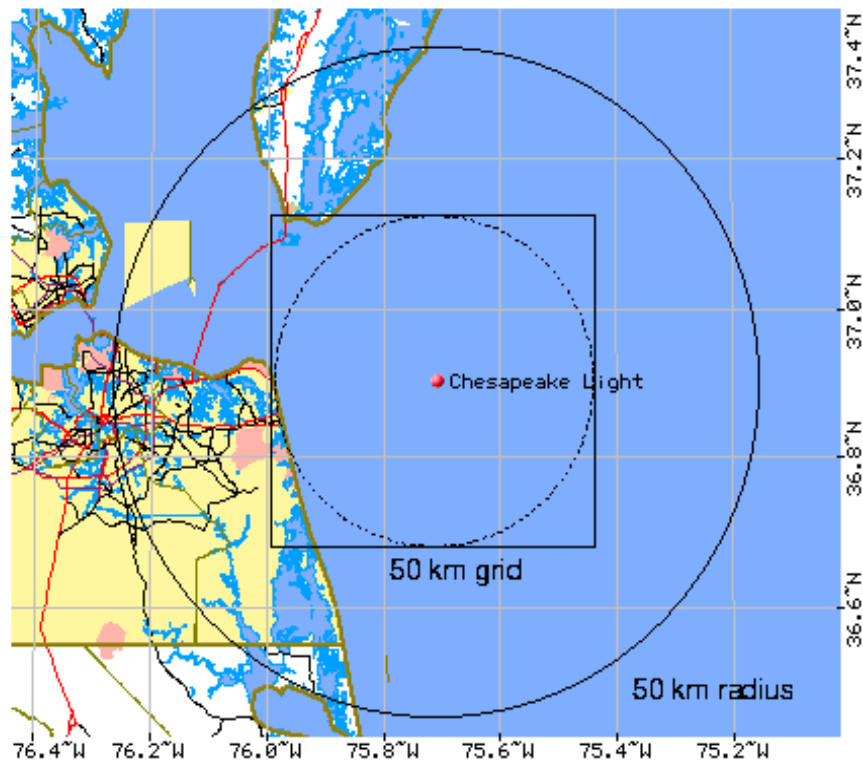


# CERES Ocean Validation Experiment (COVE)

## Operations for CLAMS IOP

COVE is a BSRN radiation measurement site on the US Coast Guard's Chesapeake Lighthouse, 25 km off of the coast of Virginia Beach, VA, USA. Purpose of COVE is to measure SW and LW radiation parameters important to CERES algorithm validation. Site was selected primarily because of its scene-type homogeneity. Power system consists of a battery bank (3600 AHr/12V), solar panels (1.5 KW peak), wind generators (1.2KW peak), and a diesel generator (7.5 KW). The BSRN basic radiometric data are acquired at 1 Hz and averaged over a minute, statistical summaries are transferred from the site using cellular telephone communications. Spread spectrum transceivers and landleased ethernet lines allow access to the five node PC LAN using PCAnywhere.



# CERES Ocean Validation Experiment (COVE)

## Operations for CLAMS IOP

### Continuously Operating

- AERONET sunphotometer
- Upwelling pyranometer\*
- Upwelling pyrgeometer\*
- Upwelling (ocean scanning) spectroradiometer
- Downwelling Global\* pyranometer
- MFRSR / UVMFR
- **pyrometer for ocean skin temperature**
- NOAA - Met station
- NOAA - Wave Height Spectra
- Downwelling Diffuse pyranometer\*
- Downwelling pyrgeometer\*
- Pyrhelimeter\*
- **GPS for column water vapor**

### Available for IOP

- Fieldspec FR spectroradiometer (ocean spectral albedo)
- Radiosonde launches
- **Downwelling (sky scanning) spectroradiometer**
- **Micropulse Lidar (MPLNet)**
- **Sea Surface Slope Statistics Measurements / Shaw / NOAA**
- **Sky and ocean surface video**

#### **Key**

- \* BSRN archived
- **to be ready by June**
- **CLAMS participation not final**

# CERES Ocean Validation Experiment (COVE)

## Operations for CLAMS IOP

### **Onsite Personnel @ COVE:**

- ODU Ocean Optics Group  
(1)
- AS&M support (2) for:  
Safety, Power Mgmt,  
sonde launches,  
MPL support, instrument  
cleaning
- UMBC BAOVE Group (1  
or 2)

**Personnel changeover  
every 4 or 5 days.**